



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,901	07/03/2003	Masahiko Kamijoh	236205US2	3608

22850 7590 04/21/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

MORRISON, THOMAS A

ART UNIT PAPER NUMBER

3653

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/611,901	Applicant(s) KAMIJOH, MASAHIKO	
	Examiner Thomas A. Morrison	Art Unit 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/9/04 and 7/3/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, there is insufficient description in the specification for the recited tilt face and contact face that each **comprise** PBT, PE, metal, PEEK and PI, as set forth in claim 7.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 4, 8, 10, 13, 16, 17, 20, 23, 24 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,824,131 (Togashi).

Claims 1, 4, 8, 10, 13, 16, 17, 20, 23, 24, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,824,131 (Togashi). In particular, this reference discloses all of the limitations of claims 1, 4, 8, 10, 13, 16, 17, 20, 23, 24 and 27.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Figs. 1-15 and 53 show an image forming apparatus (30), including

- an image forming section (near 35); and

- a sheet feed apparatus (near 4) aligned to feed a sheet to the image forming section (near 35) and having a sheet feed roller (4) in pressing contact with an uppermost sheet of a plurality of sheets, and a tilt member (either 6 or 9) opposing the sheet feed roller (4), the tilt member (either 6 or 9) including a contact face (6b or 9b, respectively) in pressing contact with the sheet feed roller (4), and a tilt face (6a or 9a, respectively) in contact with an edge of the uppermost sheet. Also, the tilt face (9a) and the contact face (9b) each comprise metal. See Figs. 11-12 and column 10, lines 49-55.

Art Unit: 3653

Regarding claim 10, Figs. 1-15 and 53 show a sheet feed apparatus (including 4), having

a sheet feed roller (4) in pressing contact with an uppermost sheet of a plurality of sheets; and

a tilt member (either 6 or 9) opposing the sheet feed roller (4), the tilt member including a contact face (6b or 9b, respectively) in pressing contact with the sheet feed roller (4), and a tilt face (6a or 9a, respectively) in contact with an edge of the uppermost sheet. Also, the tilt face (9a) and the contact face (9b) each comprise metal. See, e.g., Figs. 11-12 and column 10, lines 49-55.

Regarding claims 8 and 16, all of the limitations are met. In particular, element 9 is metal and can be considered to be the entire tilt member.

Regarding claim 17, Figs. 1-15 and 53 show a face for use in a sheet separator tilt member (either 6 or 9) of a sheet feed apparatus (including 4). Also, the face (9a and 9b) is metal and the face (9a and 9b) is at least one of a contact face (9b) and a tilt face (9a).

Regarding claim 23, Figs. 1-15 and 53 show a sheet feed apparatus (including 4), having

means for sequentially feeding sheets (4) to an imaging device (35); and

means for separating individual sheets with a tilt member (either 6 or 9). The tilt face (9a) and a contact face (9b) each comprising metal. See Figs. 11-12 and column 10, lines 49-55.

Regarding claim 24, Figs. 1-12 and 53 show a method for feeding sheets to an imaging device, the improvement including

separating individual sheets with a tilt member (either 6 or 9). Also, the tilt face (9a) and the contact face (9b) each comprising metal. See Figs. 11-12 and column 10, lines 49-55.

Regarding claims 4, 13, 20 and 27, the tilt face (9a) and the contact face (9b) each comprise metal. See Figs. 11-12.

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1, 4, 8, 10, 13, 16, 17, 20, 23, 24, and 27 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent Publication No. 2002/0036377 (Togashi). In particular, this reference discloses all of the limitations of claims 1, 4, 8, 10, 13, 16, 17, 20, 23, 24 and 27. Note: U.S. Patent Publication No. 2002/0036377 is the publication for the application that issued as U.S. Patent No. 6,824,131 (Togashi). As such, the comparison between the elements of claims 1, 4, 8, 10, 13, 16, 17, 20, 23, 24, and 27 and the elements of U.S. Patent Publication No. 2002/0036377 (Togashi) is the same as the comparison outlined above in the rejection under 35 U.S.C. 102(e).

A person shall be entitled to a patent unless –

(f) he did not himself invent the subject matter sought to be patented.

4. Claims 1, 4, 8, 10, 13, 16, 17, 20, 23, 24 and 27 are rejected under 35 U.S.C. 102(f). In particular, U.S. Patent No. 6,824,131 (Togashi) discloses all of the elements of claims 1, 4, 8, 10, 13, 16, 17, 20, 23, 24 and 27. Note: the comparison

between the elements of claims 1, 4, 8, 10, 13, 16, 17, 20, 23, 24 and 27 and the elements of U.S. Patent No. 6,824,131 (Togashi) is the same as the comparison outlined above in the rejection above under 35 U.S.C. 102(e).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0036377 as applied to claim 8 above, and further in view of U.S. Patent No. 6,688,590 (Billings et al.). Fig. 2 of U.S. Patent Publication No. 2002/0036377 shows a support member (10) with guides (8) that support a tilt member (6), but does not specifically disclose that the support member (10) comprises one of the claimed materials.

Billings et al. discloses that it is well known in the art to form a support (32) from ABS plastic. See, e.g., column 4, lines 42-46. It would have been obvious to one of ordinary skill in the art at the time of the invention, to provide the apparatus of U.S. Patent Publication No. 2002/0036377 with a support that includes ABS, e.g., to provide sufficient strength characteristics for the support.

6. Claims 3, 12, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0036377 as applied to claims 1, 10, 17 and 24 above, and further in view of Japanese Publication No. 2002-68511.

U.S. Patent Publication No. 2002/0036377 discloses that the tilt member (6) is integrally molded from a synthetic resin, but it is unclear if the synthetic resin comprises polyethylene (PE). See the numbered paragraph [0102].

Japanese Publication No. 2002-068511 discloses that it is well known to provide a sheet feeder with a separator (1) comprising polyethylene, in order to provide excellent abrasion resistance and a proper friction coefficient. See English abstract. It would have been obvious to one of ordinary skill in the art at the time of the invention, to provide the apparatus of U.S. Patent Publication No. 2002/0036377 with a tilt member that comprises polyethylene, to provide the proper abrasion resistance and friction coefficient, as taught by Japanese Publication No. 2002-068511.

7. Claims 2, 5, 11, 14, 18, 21, 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0036377 as applied to claims 1, 10, 17 and 24 above, and further in view of U.S. Patent No. 5,997,965 (Shimazu et al.). U.S. Patent Publication No. 2002/0036377 discloses that the tilt member (6) is integrally molded from a synthetic resin, but it is unclear if the synthetic resin comprises polybutylene terephthalate (PBT) or poly-ether-ether-ketone (PEEK). See the numbered paragraph [0102].

Shimazu et al. discloses that it is well known in the art to provide a separating device (1) made from either polybutylene terephthalate or poly-ether-ether-ketone, so that the separating device has low frictional resistance. See column 1, lines 55-60 and column 4, lines 26-41. It would have been obvious to one of ordinary skill in the art at the time of the invention, to provide the apparatus of U.S. Patent Publication No.

Art Unit: 3653

2002/0036377 with a tilt member made from polybutylene terephthalate or poly-ether-ether-ketone, so that the tilt member has low frictional resistance, as taught by Shimazu et al.

8. Claims 6, 15, 22 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0036377 as applied to claims 1, 10, 17 and 24 above, and further in view of U.S. Patent No. 5,802,434 (Takehara et al.). U.S. Patent Publication No. 2002/0036377 discloses that the tilt member (6) is integrally molded from a synthetic resin, but it is unclear if the synthetic resin comprises polyimide (PI). See the numbered paragraph [0102].

Takehara et al. discloses that it is well known in the art to provide a feeder with a separating device (2) made from polyimide, to assure smooth sliding and strength. See column 3, lines 47-51. It would have been obvious to one of ordinary skill in the art at the time of the invention, to provide the apparatus of U.S. Patent Publication No. 2002/0036377 with a tilt member made from polyimide, so that the tilting member has sufficient strength and sliding characteristics, as taught by Takehara et al.

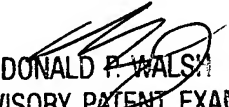
Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is 571-272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on 571-272-6944. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3653

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DONALD P. WALSH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600